

WHAT IS CLAIMED IS:

1. A connector which is mountable in/on a surface of a substrate and is connectable to a mating connector in a first direction perpendicular to the surface of the substrate, wherein the connector comprises an insulator, a plurality of contacts and a plurality of fixity members; the insulator is formed with a plurality of first holding portions for holding the respective contacts and a plurality of second holding portions for holding the respective fixity members; the first and the second holding portions are arranged in a second direction perpendicular to the first direction; each of the contacts has a first held portion held by the corresponding one of the first holding portions, a first fixing portion for fixing the contact on the surface of the substrate, and a contact portion for being brought into contact with contacts of the mating connector; and the fixity members serve to fix the insulator to the substrate in cooperation with the first fixing portions of the contacts, the connector being characterized in that:

each of the fixity members is made of the same material as the contacts and is comprised of a second held portion and a second fixing portion;

the second held portion has the same shape as the first held portion and is held by the corresponding one of the second holding portions of the insulator; and

the second fixing portion has the same shape as the first fixing portion and is for fixing the fixity member on the surface of the substrate.

2. The connector according to claim 1, wherein the first and the second fixing portions extend in a third direction perpendicular to the first and the second directions, preferably, wherein the contact portion is provided with a projection which projects in the third direction towards the

corresponding one of the first fixing portions.

3. The connector according to claim 1, wherein the first and the second holding portions are spaced at regular intervals in the second direction.

5 4. The connector according to claim 3, wherein the first and the second fixing portions are arranged parallel to each other.

5. The connector according to claim 3, wherein the first holding portions are positioned between the second holding portions in the second direction.

10 6. The connector according to claim 1, comprising at least two sets of the contacts and the fixity members, wherein the insulator is formed with two sets of the first and the second holding portions, the sets of the first and the second holding portions are arranged symmetrically in a third direction perpendicular to the first and the second directions, and each set
15 of the first and the second holding portions holds the corresponding set of the contacts and the fixity members in the manner defined in one of claims 1 to 4.

7. The connector according to claim 1, wherein:
the insulator is comprised of a pair of first wall portions, a pair of
20 second wall portions, a center island portion and a bottom portion;
each of the first wall portions stands up from the bottom portion in the first direction and extends in the second direction;
the first wall portions are spaced from each other in the third direction perpendicular to the first and the second directions;
25 each of the second wall portions stands up from the bottom portion in the first direction and extends in the third directions;
the second wall portions are spaced from each other in the second direction and connect between the respective ends of the first wall portions;

the center island portion stands up from the bottom portions and is positioned apart from the first wall portions in the third direction and from the second wall portions in the second direction so that an elongated O-like shaped groove is defined between the center island portions and the first
5 and the second wall portions; and

the contacts and the fixity members are held by the first wall portions.

8. The connector according to claim 7, wherein each of the first holding portions is formed continuously in the center island portion, the
10 bottom portion and the corresponding one of the first wall portions, and each of the second holding portions is formed continuously in the bottom portion and the corresponding one of the first wall portions.

9. The connector according to claim 8, wherein each of the first and the second holding portions is provided with a fitting hole, which is
15 formed in the corresponding one of the first wall portions and extends in the first direction from the bottom portion, and wherein each of the first and the second held portions is formed with a fitting post, which extends in the first direction and is inserted into and fitted into the corresponding fitting hole from the bottom portion.

20 10. The connector according to claim 8, wherein the contact portion partially projects from a side of the center island portion in the third direction into the elongated O-like shaped groove.

11. The connector according to claim 1, wherein:
the insulator is comprised of an insertion head portion and a bottom
25 portion;

the insertion head portion stands up from the bottom portion in the first direction and extends in the second direction; and

each of the first and the second holding portions is formed continuously in the bottom portion and the insertion head portion and continues to a side of the insertion head portion in the third direction perpendicular to the first and the second directions.

- 5 12. The connector according to claim 11, wherein the contact portion partially projects from the side of the insertion head portion in the third direction toward the outside of the insulator.